

## Break a Palindrome [\(View\)](#)

Given a palindromic string of lowercase English letters `palindrome`, replace **exactly one** character with any lowercase English letter so that the resulting string is **not** a palindrome and that it is the **lexicographically smallest** one possible.

Return *the resulting string*. If there is no way to replace a character to make it not a palindrome, return an **empty string**.

A string `a` is lexicographically smaller than a string `b` (of the same length) if in the first position where `a` and `b` differ, `a` has a character strictly smaller than the corresponding character in `b`. For example, `"abcc"` is lexicographically smaller than `"abcd"` because the first position they differ is at the fourth character, and `'c'` is smaller than `'d'`.

### Example 1:

**Input:** `palindrome = "abccba"`

**Output:** `"aaccba"`

**Explanation:** There are many ways to make `"abccba"` not a palindrome, such as `"zbccba"`, `"aaccba"`, and `"abacba"`.

Of all the ways, `"aaccba"` is the lexicographically smallest.

### Example 2:

**Input:** `palindrome = "a"`

**Output:** `""`

**Explanation:** There is no way to replace a single character to make `"a"` not a palindrome, so return an empty string.

### Constraints:

- `1 <= palindrome.length <= 1000`
- `palindrome` consists of only lowercase English letters.